Message

From: EPAResearchCompass [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=C1E8F11508674C3C954553A1129D33E5-EPARESEARCH]
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To: ORD-ALL Feds and NonFeds and RSLs [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=2c735272eef941588aefd9a05ed28823-ORD-ALL Feds and NonFeds and RSLs]
CC: MaGowan, Maricruz [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=8c4c1646850c47f6bdfb869db47c467c-MMagow02]; Harris-Young, Dawn [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=1352e37302cf4eb78a64c69a108b46e5-Young, Dawn]; Barnett, Felicia [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=5773b45cae5142fe950861dd6146f1e9-Barnett, Felicia]; Carter, Bobbi [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=f16dcafe85fc418ebd1651be2e8ab82d-Carter, Bobbi]; Gettle, Jeaneanne [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=d8e72aa7e1894faea44006fd9f22b637-Gettle, Jeaneanne]; Taylor, Dawn [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=b984d00ec06544e498ee5d986f97047c-Taylor, Dawn]; Klinger, Adam [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=346d5466632f4967adc7169c8d2ce4fd-Klinger, Adam]; Liljegren, Jennifer [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=c7098a838cd34f75b8878571fe95d939-JLiljegr]; Pollard, Solomon [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=16cdf700f8024145847a2770b84abae3-Pollard, Solomon]; Clarage, Meredith [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=ee9504437be545489f518710a5e80e68-Clarage, Meredith]; Crk, Tanja [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=fccf9b9519484e8f88e90d3573253817-Tanja Crk]
Subject: Weekly Compass: May 28, 2019

EPA

WEEKLY compass

Weekly Update: 5/28/2019

Welcome to the Weekly Compass, your gateway to information about recent and upcoming ORD activities. If you have ideas for the Weekly Compass, please send them to the editors. To see past issues, visit the archive on ORD@work.

Weekly Note from Jennifer

ORDers—

This week, ORD is convening an EPA Lead Mapping Coordination Workshop with OCSPP and the Office of the Administrator. The goals of the workshop are to identify and strengthen EPA's capabilities to contribute to Federal Action Plan goal to "Generate data, maps, and mapping tools to identify high exposure communities or locations and disparities for prioritization efforts to reduce children's blood lead levels."

RTP will host Region 4's meeting with their state environmental leaders this week. Lisa Mathews and I will participate in the meeting and provide an ORD update on the first day. The meeting agenda includes regional and division updates and a state roundtable discussion and provides an opportunity for EPA to learn more about the environmental challenges Region 4 Southeastern states are confronting and receive feedback on how our research, methods, and science-based tools could more effectively support states' efforts to protect the environment and public health. OW will also participate in this discussion. The second day will include a tour of the RTP facility and an ORD laboratory tour, including stops related to PFAS and emerging contaminants, harmful algal blooms, air sensors and more, followed by agenda topics around water quality trading and data sharing during disasters.

On Friday, John Steenbock and I will meet with House and Senate Appropriators to continue discussions about our reorganization. Thanks again for your participation in the listening sessions.

Finally, everyone should have received an email about taking the Employee Viewpoint Survey. Please take some time out of your day to take the survey. Your responses help us make EPA a better organization for everyone.

This will be a short week, but a busy one! Hope you all enjoyed the long weekend. -- Jennifer

Quick Updates

- Don't forget to check out the open opportunities on Talent Hub!
- You can read the This Week @ EPA newsletter here.
- ORD is reorganizing for the first time in 25 years to better address the increasingly complex environmental challenges of the 21st century. Learn more about the reorg.

- Upcoming Webinars
  - 6/6 Informational Webinar: 2019-2020 Small Business Innovation Research (SBIR) Phase I Solicitation

Photos of the Week: Goatscaping!

In the Lab:

Joint E.U. and U.S. Air Pollution Webinar Series

NRMRL's Rich Baldauf, along with collaborators from the European Union and U.S., have organized and launched a series of webinars focused on Passive Air Pollution Mitigation in the Built Environment. The webinar series is bringing together researchers, policy makers, and practitioners throughout the world to inform the global community on best practices for how green infrastructure, solid barriers, and urban design can combat air pollution exposure in urban areas. Two of the four webinars have now been held, with over 750 people registered from over 55 countries. Rich will lead the next webinar installment on Thursday with a focus on how green infrastructure affects urban air quality. Other speakers in the upcoming webinar include scientists from RISE Research Institutes of Sweden and USDA Forest Service.

ORD Partnership with Ex. 5 Deliberative Process (DP)

ORD in collaboration with Office of Waste Management signed a Materials Cooperative Research and Development Agreement with Ex. 5 Deliberative Process (DP) on last week to study the potential for water reuse in protein processing operations. Ex. 5 Deliberative Process (DP), ORD, and OWM hope to collaborate with USDA on risk assessment and treatment options for applying fit-for-purpose water reuse in Ex. 5 Deliberative Process (DP) operations.

EPA Observes Civil Support Team Training

Earlier this month, NHSRC's Timothy Boe and OLEM's Consequence Management Advisory Division's (CMAD's) Leroy Mickelsen observed the 42nd Civil Support Team, Weapons of Mass Destruction conduct chemical, biological, and radiological (CBR) training at UNC Wilmington, North Carolina. The exercise included several simulated chemical and radiological scenarios as well as a "person down" simulation. EPA provided feedback to training participants and documented lessons learned for incorporation into EPA's training scenarios and research planning efforts.

Development of a Rapid Viability Polymerase Chain Reaction Method for Detection of Yersinia pestis

Due to the occurrence of natural plague outbreaks and its historical use as a biological weapon, *Yersinia pestis* (*YP*) is considered a high-priority biological threat agent. *YP* can remain viable in certain environments including water for more than 100 days. NHSRC's Sanjiv Shah recently co authored a paper on the Rapid Viability Polymerase Chain Reaction (RV-PCR) method, which combines (1) a shorter sample incubation time in liquid culture (compared to plate culture) with (2) real-time PCR analysis before and after incubation. The approach uses the change in real-time PCR response to specifically detect low concentrations of viable *YP.*

New Publication on Fish Habitats

A manuscript authored by NCEA's Michael Kravitz, has just been published online. The manuscript--"*On Assessing Risks to Fish Habitats and Populations Associated with a Transportation Corridor for Proposed Mine Operations in a Salmon-rich Watershed*,"

addresses the complex problem of assessing risks from a potential transportation corridor in a virtually roadless watershed that crosses important salmon streams and rivers, and would be a component of a large mine operation.

PFAS plant visit, Fayetteville, NC

NRMRL's Jeff Ryan, CW Lee, and Bill Linak will accompany Cary Secrest (OECA) and the North Carolina Department of Environmental Quality (NCDEQ) on a visit to the Chemours Fayetteville plant on Thursday. The primary objective for the visit is to observe and better understand the various processes at the plant and how they potentially translate into air emissions. It is also an opportunity to learn more about the plant's existing emission control strategies and technologies. The air permit modification package that Chemours submitted to NCDEQ for the planned thermal oxidizer indicates the installation will be complete and operational by the end of this year.

Cyanobacteria Assessment Network (CyAN) Patent

This month, a U.S. Patent was issued to EPA for the Cyanobacteria Assessment Network (CyAN) mobile application. Inventors listed on the patent include NERL's Blake Schaeffer, NRMRL's Robyn Conmy, and NHEERL's Darryl Keith. CyAN is a multi-agency project among EPA, NASA, NOAA, and USGS to develop an early warning indicator system using historical and current satellite data to detect algal blooms in U.S. freshwater systems. This research supports federal, state, and local partners in their monitoring efforts to assess water quality to protect aquatic and human health. The CyAN mobile application will provide water quality managers with a user-friendly platform for accessing satellite data to allow fast, efficient, initial assessments across lakes and reservoirs.

Grantee Publication: Assessing Impacts of Pollution Emissions

EPA grantees Ex. 5 Deliberative Process (DP) and colleagues recently published the article Fine-scale damage estimates of particulate matter air pollution reveal opportunities for location-specific mitigation of emission in *Proceedings of the National Academy of Sciences.* The article is on a new tool for rapidly assessing the impacts of pollution emissions on a fine scale and application of the tool to better understand the contribution of each economic sector on air quality.

In the Office:

Employee Viewpoint Survey

Please take 20 or 30 minutes out of your day and let leadership hear from you by participating in the Employee Viewpoint Survey. Employees should look for a survey link from the "Federal Employee Viewpoint Survey-EP <EVEP@opm.gov>" with the subject: "The 2019 OPM FEVS: Empowering Employees. Inspiring Change." The survey will be open through June 27, 2019. The ORD response rate as of 8:00 am this morning was 17.1%. We are behind the agency rate of 20.7%, as well as the most of the program offices. Only OCFO has a lower rate at 16.9%. Within ORD, OARS leads with 19.4%

Annual Employee Conversation with the Scientific Integrity Official

OSA is hosting its Annual Employee Conversation with the Scientific Integrity Official on Thursday June 6. Find updated information here.

Association of Schools and Programs of Public Health (ASPPH) Interviews

EPA offices (HQ and Regions) may interview ASPPH Environmental Health Fellows for fall placement during the month of May. EPA established the partnership with ASPPH in 2003 to prepare the future public health workforce by providing masters and doctoral-level hands-on training experiences for recent public health graduates. Since its inception, 126 early-career public health professionals have trained at EPA through this program. For more information, contact Michaud.jayne@epa.gov.

Women of Technology Transfer: Patent Holders

The Federal Technology Transfer Act (FTTA) program created a new webpage highlighting the contributions of women scientists/inventors at EPA. The new website, Women of Technology Transfer: Patent Holders, provides information about EPA's women inventors and their patents. According to the U.S. Patent and Trademark Office, over the past decade only 4% of patents were issued to women inventors or co-inventors, which demonstrates the significance of the accomplishments of the EPA women inventors. During the course of cutting-edge research, EPA scientists and engineers invent new technologies, which EPA patents and then licenses to companies to further develop and sell. In exchange for access to these innovations, the companies pay royalties to EPA. The royalties are split between the Lab or Center where the invention occurred, and the individual EPA inventors.

Accolades:

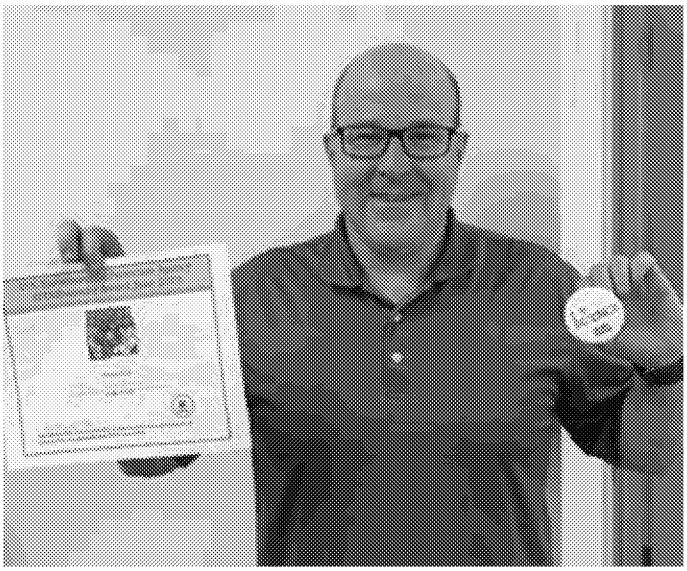
UN Environmental Effects Assessment Panel Letter of Appreciation

Ex. 5 Deliberative Process (DP) Executive Secretary of the United Nation Environment Programme's Ozone Secretariat, recently sent a letter of appreciation to NERL's Richard Zepp. The letter expresses Ex. 5 Deliberative Process (DP) appreciation for Zepp's contribution to the *2018 Assessment of Environmental Effects and Interactions of Stratospheric Ozone Depletion, UV radiation, and Climate Change*. Zepp authored the Biogeochemical Cycles chapter of the report and, as a member of the Environmental Effects Assessment Panel (EEAP), provided advice and information to the Secretariat. For over 30 years, the work of the EEAP has contributed to the decisions and actions taken by nations to protect the ozone layer and our climate. Likewise, the 2018 report will be considered during 2019 meetings. Ex. 5 Deliberative Process (DP) closes letter by writing that the Secretariat looks forward to Zepps's continued support of and involvement in the EEAP.

STEMbassador Tim Watkins

Each month, EPA recognizes a STEMbassador to highlight that person's efforts to communicate science and the importance of protecting the environment and human health. The STEMbassador for June 2019 will be Tim Watkins (NERL Director). Tim is

being recognized for his efforts to advance the communication of EPA science through his support of community engagement and STEM education.



NERL Director, Tim Watkins, is the EPA STEMbassador for June 2019

Office of Water Award For Improving National Lakes Assessment (NLA) Data Collection

A team, including NHEERL's Karen Blocksom, has received the Office of Water's 2017 Achievement in Science and Technology Award for reducing the processing time for lake monitoring data from months to minutes. As a core member of the NLA Field Logistics Team, Blocksom used applications and iPads to better capture the monitoring data and quickly provide it to partners and collaborators. Non-ORD team members include Sharon Gonder, Brian Hasty, Amina Pollard, and Sarah Lehmann.

In the Community:

International Science and Engineering Fair

EPA staff recently participated in the International Science and Engineering Fair in Phoenix, AZ. A program of the Society for Science and the Public, ISEF is the world's largest international pre-college science competition. This year, 1,842 high school students from 80 countries, regions and territories presented their independent research. Melissa Anley-Mills, Lisa Beckham (EPA Region 9) and Dr. Denice Shaw served as judges, selecting the student whose research best demonstrated a commitment to environmental sustainability and stewardship. For ten years EPA has participated as a Special Award Organization at ISEF. In 2011 our Sustainability Award was re-named in honor of Patrick Hurd who managed the effort behind EPA's first two Sustainability Awards at ISEF.

The winner of our 2019 Patrick H. Hurd Sustainability Award is Harshal Agrawal, a senior at Dr. Ronald E. McNair Academic High School in Jersey City, New Jersey. Harshal's project, "Large-Scale Field Testing of Stropharia Mycelium Buffer Strips for Harmful

Algae Bloom Prevention, Year 5," has a long-term goal of developing a low-cost, eco-friendly, and efficient way of preventing Harmful Algal Blooms (HABs). Jacqueline Prawira, a freshman at Mountain House High School in Mountain House, California, received an honorable mention for her project "OceanBioplas: The Plasticity of Marine Exoskeleton-Inspired Materials and their Degradability in the Environment (Soil and Seawater/Saltwater)." Jacqueline's project used biomimicry to replace single-use plastics with an alternative, biodegradable solution. EPA's P. Hurd Award provides funding for the winning student and a chaperone to participate in and display the student's project at EPA's People, Prosperity and the Planet (P3) Student Design Competition for Sustainability. P3 is an annual event that brings together young environmental innovators and scientists to showcase their designs for a sustainable future. The 2019 P3 National Student Design Expo is June 16-17, 2019 in Boston, MA.

EPA also participates in ISEF's Public Day, which draws local school children and their teachers to the science event. Melissa led 2 classroom sessions exploring energy choices with the EPA Generate Game with students and teachers from Phoenix Union Wilson College Prep and Red Mountain High School. More information on Generate.

Learn more about the P. Hurd awardees and the award.

EPA-RTP STEM Outreach Program

Tomorrow, EPA-RTP's Community Engagement and STEM Education Program will lead a hands-on activity at W.G. Pearson Elementary School in Durham, N.C. for its biweekly session in a STEM elective for 4th graders. Tomorrow, the Program will also present a hands-on activity about air quality to K-5 students at Easley Elementary School in Durham.

Photos of the Week: Goatscaping!

NHEERL's Atlantic Ecology Division hosted goats and herders from Laurel Hill MicroFarm to perform their annual spring/summer maintenance of ORD landscape and pollinator habitat in Narragansett, Rhode Island. The goats cleared overgrown landscaping, particularly invasive and nuisance species, without emissions and noise from gasoline engines that are traditionally used in landscaping, while also safely removing poison ivy and invasive species in the area. "Goat scaping" also protects pollinator habitat from invasive disturbances, creates space for new pollinator-friendly species to grow, and leaves areas free of vegetation to provide habitat for ground-nesting pollinators. This project demonstrates NHEERL's continued commitment to improving and increasing pollinator habitat and shows the neighboring community that ORD is operating the facility in an environmentally friendly fashion.